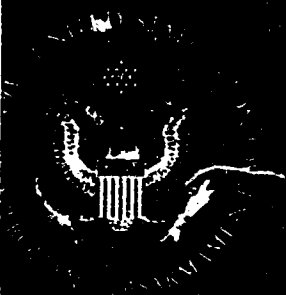


AD 682053



UNITED STATES ARMS CONTROL
AND DISARMAMENT AGENCY

WORLD
MILITARY
EXPENDITURES
1966-67

Reproduced by the
CLEARINGHOUSE
for Federal Scientific & Technical
Information Springfield Va. 22151

AD 682053

**UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY
ECONOMICS BUREAU**

**WORLD MILITARY EXPENDITURES
AND RELATED DATA**

**CALENDAR YEAR 1966
AND SUMMARY TRENDS, 1962-1967**

**RESEARCH REPORT 68-52
December 1968**

INTRODUCTION

✓ For the third year the United States Arms Control and Disarmament Agency has compiled information from all sources in order to assess the size and impact of the world's military expenditures. The survey covers 120 countries, all those for which factual data exist or for which there is some reasonable basis for estimation.

Although there are a number of cases in which information is incomplete, three years ago ACDA made the decision to publish the available data in the belief that this would help to focus attention on the subject and lead (1) to a better understanding of the economic and social significance of the arms competition and (2) to improvement of the statistics. The ACDA report was the first to provide world-wide coverage with a breakdown of national figures, as well as a world total converted to dollar equivalents. The report also compares military expenditures with certain other public expenditures and with gross national product. As a reference tool it has attracted considerable interest internationally, and among public officials as well as scholars.

I hope this compilation will not only meet the needs of scholarship, however, but will also serve as the annual "reminder" which we intend it to be.

William C. Foster

William C. Foster
Director

December 1968

CONTENTS

	Page
Introduction, by Director William C. Foster.	iii
Highlights of the Data	1
Definitions of Terms	7
Statistical Tables	8
 <u>Charts</u>	
I. World military expenditures (1962-1967)	1
II. Trends in military expenditures and GNP (1964-1967).	3
III. Developed and less developed countries' share of world total in 1966	4
IV. World military and other public expenditures, 1966	5
 <u>Tables</u>	
WORLD-WIDE	
Summary Table: Trends in military expenditures and GNP, 1964-1967.	8
I. Military expenditures and related data, by country, 1966.	9
II. Military expenditures and related data—regional summary, 1966 . .	
LESS DEVELOPED COUNTRIES	
III. Military expenditures and related data for less developed countries—regional summary, 1966.	15
IV. Military expenditures and gross national product, by selected less developed country, 1961, 1964-1966	16
SELECTED COUNTRIES	
V. Purchasing power equivalents of military expenditures and gross national product, by selected country, 1964-1966	17
VI. Ranking of major countries according to GNP and military expenditures, 1966.	20
 <u>Appendix</u>	
Notes on Data, Sources and Methods	21

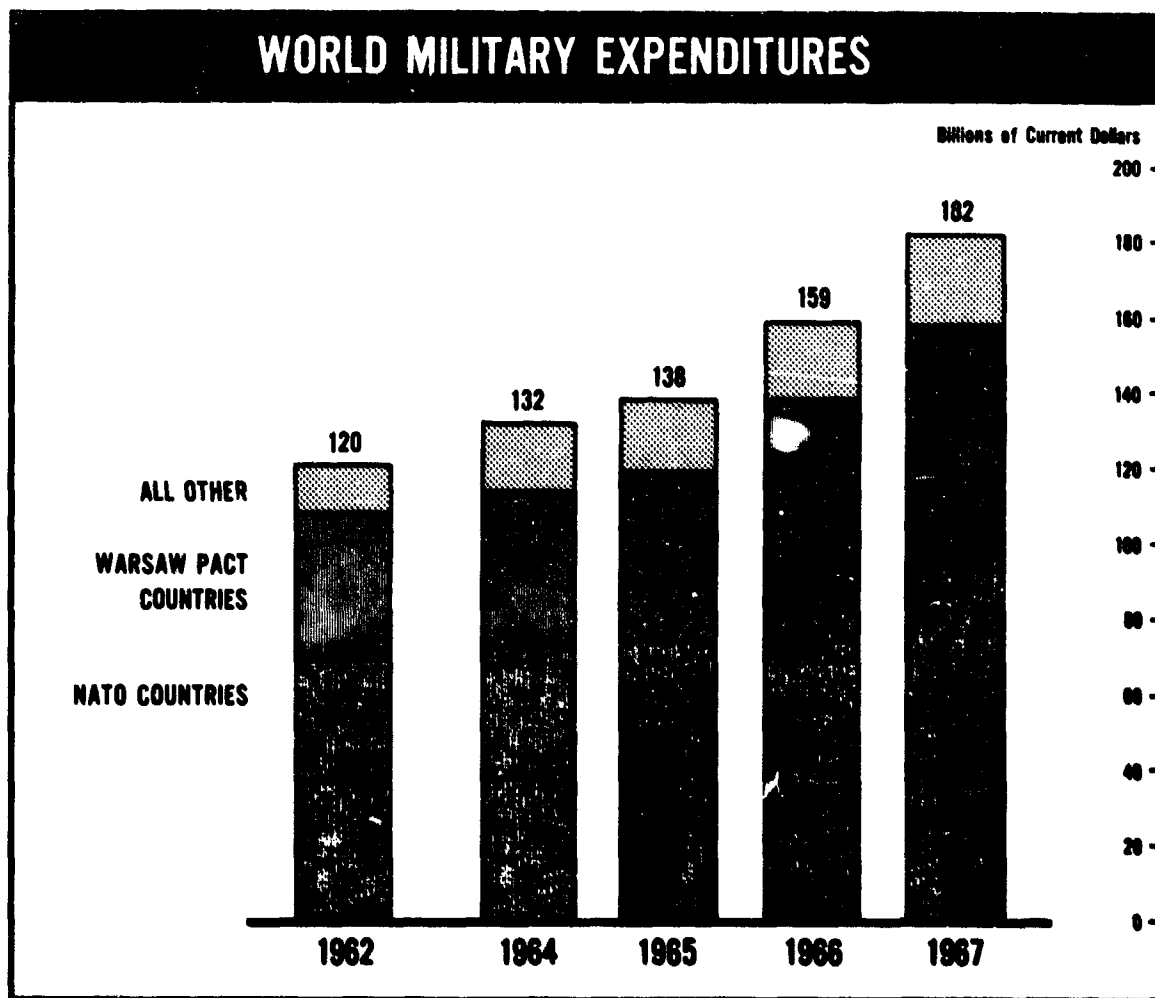
HIGHLIGHTS OF THE DATA

This third annual survey of military expenditures by the U. S. Arms Control and Disarmament Agency (ACDA) covers 1967 insofar as preliminary data permit estimates on a regional or global basis. The statistical tables which provide figures for 120 countries are for 1966, the latest year for which the detailed figures are available.

Global expenditures for military purposes have reached a new record high level. From \$132 billion in 1964, they rose to \$138 billion in 1965, \$159 billion in 1966 and an estimated \$182 billion in 1967. Preliminary data suggest a continued rise in 1968. Since 1962, when UN experts estimated world military outlays at \$120 billion, the increase has been more than 50 percent (The foregoing figures are in current dollars.)

Military spending today exceeds that of any prior period except the peak fighting years of World War II. Global military expenditures now take more than 7 percent of the world's gross product. In money terms they are equivalent to the total annual income produced by the one billion people living in Latin America, South Asia and the Near East. They are greater by 40 percent than world-wide expenditures on education by all levels of government and more

CHART I



than three times world-wide expenditures on public health.

Very rough estimates indicate that since 1900 more than \$4,000 billion have been spent on wars and military preparedness. If the current level of military spending should continue, this total will be doubled in only 20 years. If the recent rate of increase in military spending continues, the arms race will consume another \$4,000 billion in only 10 years.

The Trend of Military Expenditures

World military expenditures surged sharply upward in 1966 and 1967, after two years of comparatively small changes overall (Chart I). Spending in 1967 was \$44 billion greater than in 1965, an increase of almost one-third.

The dominant influence of the NATO and Warsaw Pact powers on the world's arms race became more pronounced. The two major military alliances accounted for nearly nine-tenths of the rise in expenditures in 1966 and 1967. The increased outlays of the two leading powers in the alliances, the United States and the Soviet Union, made up \$35 billion of the \$44 billion increase from 1965 to 1967 in world military spending.

Although ACDA's two earlier surveys had found indications of a somewhat more rapid rise in expenditures in developing than in developed countries, this tendency was no longer evident in 1966 and 1967. Compared with the competition between the bigger powers, the trend in the less developed countries (LDC's) appeared relatively moderate. Increases in military expenditures from 1965 to 1967 were 35 percent for the NATO countries, 29 percent for the Warsaw Pact and 24 percent for the rest of the world including the LDC's.

Regional totals of military outlays turned higher in most cases from 1965 to 1966, the greatest relative increases being in North America, Europe and Asia. The only regional total which appeared to have dropped slightly was that for Africa. The expenditure total for South Asia was lower in 1966 than in 1965 in dollar equivalents (Table I) but this was largely a reflection of a new official exchange rate for India; India's military expenditures rose in terms of purchasing power equivalents (Table V).

Comparisons with Economic Growth

Since 1964, the year of ACDA's first survey of world military expenditures, there has been a

steady and substantial rise in the aggregate gross national products (GNP) of the world, as well as in military outlays. However, not only in absolute but also in relative terms (that is, in comparison with the broader economic base represented by a larger GNP) the burden of the arms race was heavier for the world as a whole in 1967 than in 1964.

Chart II on page 3 and the summary table on page 8 show the relative trends in GNP and military expenditures and their implications in per capita terms, taking into account the rise in population and in prices between 1964 and 1967. The following conclusions are indicated:

1. The increase in world-wide outlays for defense is considerably larger than the increase in population, a 38 percent rise in military expenditures comparing with a 7 percent increase in population. This means that per capita military expenditures in current dollars* were 30 percent higher in 1967 than they were in 1964—a world average of \$53 per person per year compared with \$41 in 1964.

2. If the world-wide inflation of prices is taken into account, the increase in military expenditures in real terms (that is, in constant dollars*), although less pronounced, is still a substantial 23 percent in total and 16 percent per capita.

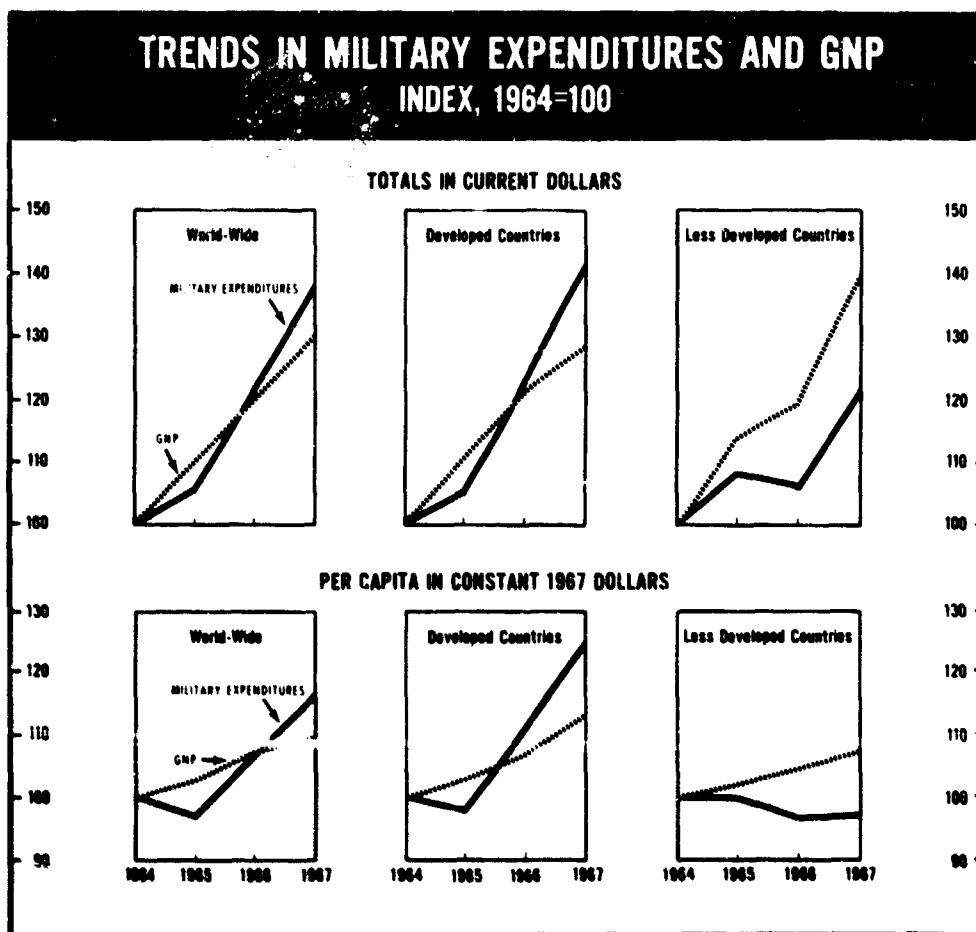
3. The relative rise in military expenditures from 1964 to 1967 has been more rapid than the growth of world GNP. While military expenditures per capita expressed in constant prices rose 16 percent, GNP per capita increased only 9 percent, suggesting that a significant share of the increment in real product did not contribute to the improvement of living standards but went instead to heavier military expenditures.

Variations in Pattern

The 1964-1967 period shows striking variations in national and regional trends in both military outlays and in comparative measures

* Figures in current dollars reflect the prices and exchange rates of the respective years to which they apply. Figures in constant dollars have been adjusted for changes in both prices and exchange rates to show real values in terms of 1967 dollars. (See discussion of prices in Appendix).

CHART II



of economic change. For summary purposes, Chart II illustrates these differences in terms of two general categories of countries, the developed and less developed.

In the developed countries the sharpest rise in military outlays occurred after 1965 and by 1967 had pushed this index above the GNP trend. In constant dollars per capita, military expenditures in these countries in 1967 averaged 24 percent higher than in 1964, compared with the 18 percent rise world-wide. The relative gain in real GNP per capita was only half as great, indicating that a growing proportion of the total product in these countries went to military programs. In 1967 the ratio of military expenditures to GNP in the developed countries averaged 8 percent, compared with 7 percent in 1964.

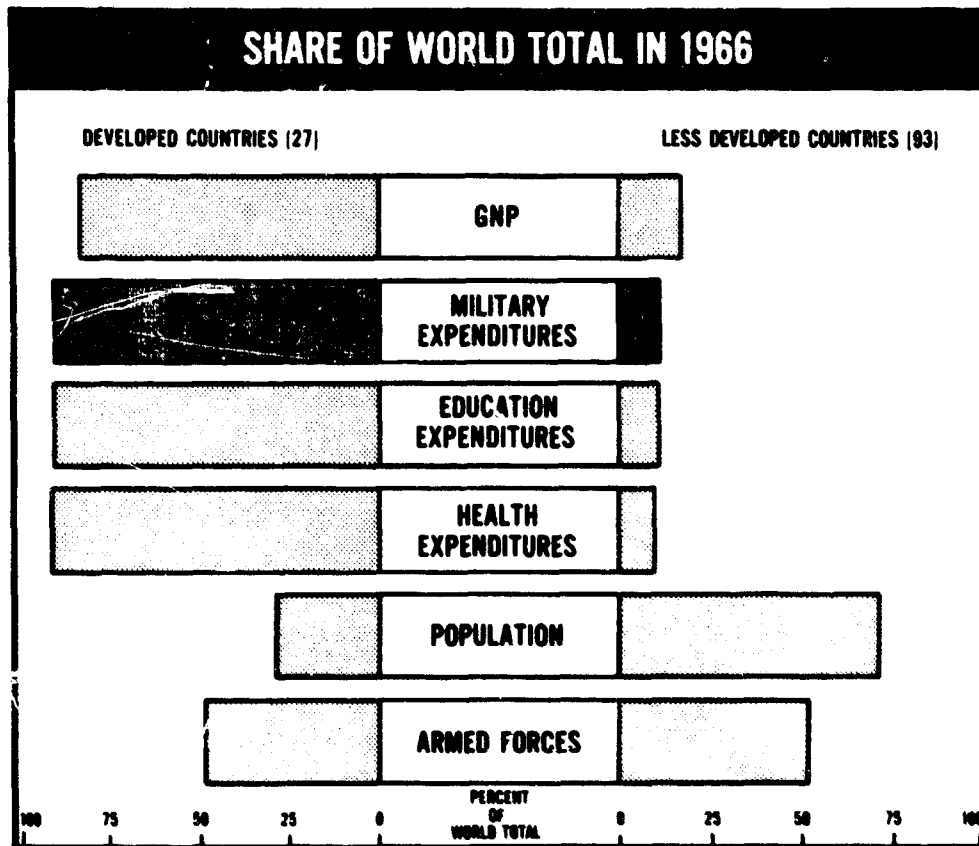
In the less developed countries the trend of military expenditures relative to GNP was somewhat more restrained. The rise in military spending appeared to taper off in 1966. Although a new spurt developed in 1967, the index stayed below that for GNP. In real terms, per capita outlays in 1967 averaged slightly less

than in 1964, while GNP was slightly higher. The ratio of military expenditures to GNP diminished somewhat over the period; by 1967 it was about 4 percent. This compared with 8 percent in the developed countries.

The 4 percent share of the LDC's product, however, was taken out of a considerably smaller overall product and one that was growing more slowly. For these reasons the diversion of resources to military programs in these countries probably represented a greater strain on their economies in terms of the extent and urgency of unmet needs. Per capita GNP in the LDC's averaged less than \$200 in 1967, not even one-tenth that in the developed countries. A severe price inflation in many of the LDC's and a relatively large increase overall in population (8 percent compared with 3 percent in the developed countries) made the GNP growth rate per capita a very modest one. In real per capita terms the rate of growth in the less developed areas between 1964 and 1967 was only half that of the developed countries.

What these divergent trends signify for the distribution of resources between the richer

CHART III



and poorer parts of the world is suggested by Chart III. By 1966 the 27 developed countries in this survey, representing 28 percent of the world's population, had 83 percent of its product and spent 89 percent of world military expenditures.

The 93 less developed countries, with 72 percent of the population, had only 17 percent of the world GNP. They spent 11 percent of world military expenditures. Although accounting for an increasing proportion of the world's population, the LDC's had not improved their relative economic position during the period under review.

Further comparisons between the developed and developing countries are discussed in the section following.

Other Public Expenditures

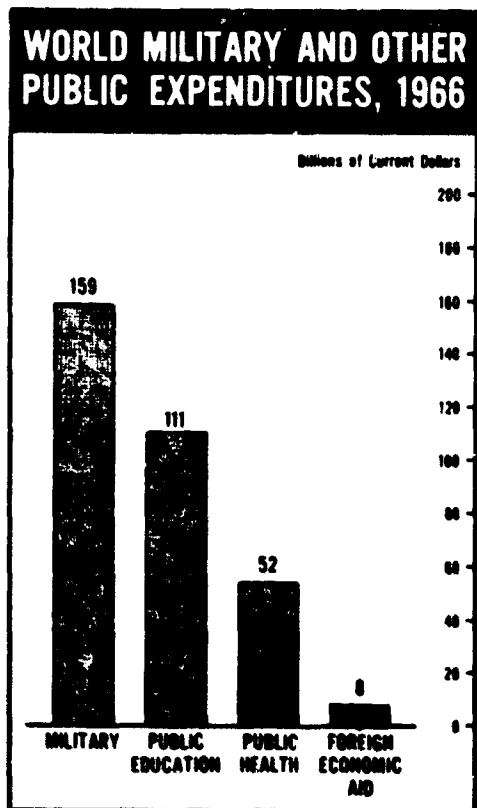
The dimensions of the military component of national budgets take on more significance when compared with other types of public outlays. The data available permit comparisons with public expenditures on education and health by all levels of government and with expenditures for official foreign economic assistance to LDC's (Chart IV). Unfortunately

the figures for education and health are not yet on as current a basis as military expenditures and GNP; therefore they do not lend themselves to comparisons of trends and should be used in a broad rather than precise way for comparisons of level.

Education — The size of the world's public education budget is about two-thirds the budget for military programs. Half the governments in the world spend more on defense than on education. The average annual expenditure per soldier, world-wide, is \$7,800. For the estimated one billion young people in the world school-age population (ages 5-19), public expenditures for education average \$100 a year.

Country-by-country comparisons of education expenditures must be made cautiously because of differences in national practices with respect to the financing of education. Communist countries support all education through the public budget while others do so through varying mixes of public and private funds. In the United States, for example, the Office of Education estimates private expenditures at \$7 billion in 1966, compared with national, state and local governmental expenditures of \$34 billion.

CHART IV



On average, developed countries spend a significantly higher proportion of their gross national product on public education (5 percent) than do LDC's (3 percent). This relative showing for the two groups of countries is roughly similar to the relative proportion of GNP going to military expenditures.

The contrasts between developed and developing are more marked when the differences in population are taken into account. (See Chart III.) LDC's have 72 percent of the world's population but their public expenditures on education represent only 11 percent of the world's expenditures. On a per capita basis this means that LDC's spend an average of \$5 annually for education and developed countries an average of \$100.

Health — The world's public health budget is \$52 billion, or one-third the size of its military budget. Only 36 countries, out of 120, spend as much on public health programs as on military programs.

As the figures quoted relate to current outlays only, they understate total public expenditures on health. In the countries for which recent data are available, national practices vary sharply, but on average reported capital outlays in 1966 and 1967 represented a 10 percent addition to public health budgets.

In the public health field the difference between the developed and developing countries is somewhat more extreme than it is in public education. Developed countries in 1966 accounted for more than 90 percent of world expenditures, LDC's for less than 10 percent. Public outlays for health care average \$50 per person annually in the developed countries, and \$2 per person in the LDC's.

Like education, health care is privately financed to varying degrees in different countries. Available evidence suggests that on the whole private spending is much more significant in this field than it is in education. In the United States, as an example, it is estimated that private spending for health is approximately 3 times public disbursements.

Foreign economic aid — Official foreign economic assistance provided to the LDC's was approximately the same in 1966 as in 1965. A world total of about \$8 billion in economic aid was less than one-half of one percent of the GNP of the donor countries and equivalent to 6 percent of their military expenditures. Aid given averaged \$8 per capita in the developed countries, as compared with \$170 per capita spent on military programs.

National receipts of foreign economic assistance as shown in the country tabulations amounted to \$7 billion, including multilateral as well as bilateral contributions, and receipts from Communist donors. (The difference in the total of aid given and aid received is explained in the Appendix, page 22). All aid received was equal to 2 percent of the LDC's gross product. The military expenditures of the LDC's were more than twice as large as their receipts of foreign economic aid.

Manpower

One additional measure of the resource costs of military programs is the manpower which they absorb. This includes not only the armed forces themselves but also the civilians employed in supplying military goods and services directly to the armed forces, and in producing the raw materials, equipment and other goods and services that are needed indirectly in the production of military goods and services.

The data available on a world-wide basis cover only active-duty armed forces. In 1966 these numbered over 20 million men and women. UN experts in 1962 estimated that in addition to 20 million in the armed forces well

over 30 million persons might be directly or indirectly engaged in productive activities resulting from military expenditures. Totals of this order of magnitude are also suggested by recent studies of U.S. manpower utilization.

A total armed forces and military-related employment of over 50 million is larger than the total population of France. It is about 4

percent, or one in twenty-five, of the economically-active population of the world. Although in absolute numbers this employment may be larger in the developed than in the less developed countries, it is in the latter, where trained and educated manpower are relatively limited, that the diversion of skills from the civilian economy may represent the more serious factor affecting economic progress.

DEFINITIONS OF TERMS*

Gross National Product (GNP) represents an economy's total output of goods and services, valued at current market prices paid by the ultimate consumer. Methods of conversion to U.S. dollars are outlined in the Appendix.

Military Expenditures are current and capital expenditures to meet the needs of the armed forces, including expenditures of national defense agencies for military programs, and expenditures for the military components of such mixed activities as atomic energy, space, research and development, paramilitary forces, and military assistance to foreign countries.

Foreign Economic Aid Received by less developed countries (LDC's) comprises official bilateral grants and loans (gross of repayments) disbursed by Development Assistance Committee (DAC) countries and net aid received from multilateral agencies. Aid Given by DAC countries includes official bilateral aid and net contributions to multilateral agencies. Aid Given by communist countries represents gross drawings by all non-communist LDC's, and excludes intra-communist aid. Aid from private sources and military assistance are excluded.

Public Education Expenditures include current and capital expenditures for pre-school, primary, secondary and university-level education. Wherever possible, expenditures by all levels of government are covered. Private spending is not included.

Public Health Expenditures represent current expenditures by all levels of government for the provision of medical services. Public health capital outlays are excluded here since they are not consistently available. Private spending is also excluded.

Armed Forces refer to military personnel actually on duty, including paramilitary forces where significant, and excluding reserve forces.

Less Developed Countries (LDC's), 93 in number, are the countries listed under Latin America, the Far East except Japan, South Asia and the Near East, and Africa except the Republic of South Africa, and also include, in Europe, Albania, Bulgaria, Greece, Portugal, Spain, Turkey and Yugoslavia.

Developed Countries, 27 in number, are all countries listed under North America, Oceania, European NATO except Greece, Portugal and Turkey, the Warsaw Pact except Bulgaria, and include Austria, Ireland, Finland, Sweden, Switzerland, Japan and South Africa.

* For further discussion of terms as used in this report, see Appendix, pages 21-24.

STATISTICAL TABLES

The summary table below presents world-wide trends in military expenditures and GNP in the 1964-1967 period, based on preliminary estimates for 1967 and previous reports for earlier years, as well as the data presented in the present report.

Table I is the basic table for calendar year 1966, the latest period for which adequate coverage of 120 countries is available. It shows military expenditures and various other economic data (GNP, foreign aid, public education expenditures, public health expenditures, population and armed forces), all values being expressed in 1966 prices and official exchange rates. Regional summaries of the 1966 data are shown for all countries in Table II and for LDC's in Table III.

In addition, trends in military spending and GNP for 34 selected LDC's in the 1961-1966 period are presented in Table IV in terms of constant 1966 prices and exchange rates. These trends are also measured in Table V at estimated purchasing power equivalents rather than official exchange rates (and at current prices) for 63 individual countries.

Table VI shows how the world ranking of the 30 countries with the largest total GNP compares with their ranking in terms of per capita GNP and military expenditures.

**SUMMARY TABLE:
TRENDS IN MILITARY EXPENDITURES AND GNP, 1964-1967**

	TOTAL (Billions of Dollars)				PER CAPITA (Dollars)			
	1964	1965	1966	1967	1964	1965	1966	1967
-----In Current Dollars-----								
MILITARY EXPENDITURES								
World-wide	132	138	159	182	41	42	47	53
Developed	116	120	142	162	125	128	149	170
Less developed	16	18	17	20	7	8	7	8
GNP								
World-wide	1,920	2,120	2,311	2,500	597	642	687	729
Developed	1,589	1,743	1,916	2,040	1,715	1,847	2,020	2,141
Less developed	331	377	395	460	145	160	164	186
-----In Constant 1967 Dollars-----								
MILITARY EXPENDITURES								
World-wide	147	148	164	182	46	45	49	53
Developed	128	128	145	162	138	135	153	170
Less developed	19	20	19	20	9	8	8	8
GNP								
World-wide	2,159	2,264	2,403	2,500	671	688	715	729
Developed	1,761	1,847	1,966	2,040	1,901	1,958	2,073	2,141
Less developed	398	417	437	460	174	177	181	186

TABLE I. MILITARY EXPENDITURES AND RELATED DATA, BY COUNTRY, 1966
(Amounts in U.S. dollars at current prices and exchange rates ^{1/2})

REGION AND COUNTRY	GROSS NATIONAL PRODUCT (GNP)		MILITARY EXPENDITURES		FOREIGN ECON. AID REC'D/ GIVEN ^{2/}		PUBLIC EDUCATION ^{3/} EXPENDITURES ^{4/}		PUBLIC HEALTH EXPENDITURES ^{4/}		POPULATION (MID-YEAR)		ARMED FORCES	
	Mill \$	\$ Per Capita	Mill \$	% of GNP	Mill \$	Mill \$	Mill \$	Mill \$	Mill \$	Mill \$	Thousands	Thousands	Thousands	% of Pop.
<u>World Total</u>	\$2,311,077	\$ 687	\$158,976	6.9%	\$7,135 7,965	\$110,901	\$52,183				3,363,414	20,305		.6%
<u>North America</u>	800,900	3,696	64,883	8.1	4,248	37,347	13,737				216,970	3,201		1.5
United States	747,600	3,796	63,283	8.5	4,011	34,306	12,188				196,920	3,094		1.6
Canada	53,300	2,658	1,600	3.0	237	3,039	1,549				20,050	107		.5
<u>Europe</u>	1,037,324	1,455	76,479	7.4	574 3,075	58,483	33,545				712,904	7,836		1.1
<u>NATO, European</u>	466,621	1,570	21,335	4.6	264	18,761	6,070				297,075	2,853		1.0
Belgium	18,130	1,903	530	2.9	81	868	37				9,528	107		1.1
Denmark	11,140	2,322	310	2.8	26	584	376				4,797	45		.9
France	101,380	2,052	5,300	5.2	823	3,439	350				49,400	523		1.1
Germany, West	119,580	1,990	4,950	4.1	595	3,832	1,547				60,076	450		.7
Greece	6,579	764	240	3.6	54	100	47				6,614	159		1.8
Iceland	556	2,837	0	0	NA	15	7				196	0		0
Italy	61,440	1,182	2,125	3.5	247	3,112	384				51,962	376		.7
Luxembourg	676	2,018	10	1.5	NA	29	10				335	3		.9
Netherlands	20,750	1,666	775	3.7	94	1,045	220E				12,455	130		1.0
Norway	7,590	2,022	260	3.4	13	373	127				3,753	34		.9
Portugal	4,070	436	240	5.9	35	49	37				9,335	162		1.8
Turkey	9,420	295	445	4.7	210	221	108				31,880	440		1.4
United Kingdom	105,310	1,924	6,150	5.8	610	5,094	2,820				54,744	424		.8
<u>NATO Total</u>	1,267,521	2,466	86,218	6.8	264 6,772	56,108	19,807				514,045	6,054		1.2
<u>Warsaw Pact</u>	478,500	1,434	52,290	NA ^{6/}	430 E	36,294	25,519				333,989	4,253		1.3
Bulgaria	7,600	918	210E	2.8		255	180				8,257	156		1.9
Czechoslovakia	23,800	1,871	1,400	5.9		1,087	989				14,240	220		1.5
<u>Germany, East</u>	28,300	1,658	1,100	3.9	100 E	1,364	1,100E				17,067	122		.7
Hungary	12,000	1,179	300	2.5		524	323				10,179	109		1.1
Poland	33,200	1,047	1,750	5.3		1,698	1,396				31,698	280		.9
Romania	16,600	867	530	3.2		765	531				19,143	201		1.0
Soviet Union	357,000	1,531	47,000	NA ^{6/}	330 E	30,600	21,000				233,105	3,165		1.4
<u>Other European</u>	92,203	1,123	2,854	3.1 ^{7/}	310	3,428	1,956				82,140	780		1.0
Albania	700E	366E	70E	10.0 ^{7/}	NA	87	12				1,914	38		2.0
Austria	10,020	1,374	135	1.3	56	338	262				7,290	40		.5

See footnotes on page 13.

TABLE I. Continued

REGION AND COUNTRY	GROSS NATIONAL PRODUCT (GNP)		MILITARY EXPENDITURES		FOREIGN ECON. AID REC'D/ GIVEN ² / Mil \$	PUBLIC EDUCATION ³ / EXPENDITURES- Mil \$	PUBLIC HEALTH EXPENDITURES- Mil \$	POPULATION (MID-YEAR) Thousands	ARMED FORCES	
	Mil \$	\$ Per Capita	Mil \$	% of GNP					Thousands	% of Pop.
Other European (Cont'd)										
Finland	\$ 8,620	\$1,858	\$ 141	1.6%	NA	\$ 481	\$ 284	4,639	43	.9%
Ireland	2,943	1,020	37	1.3	NA	92	33	2,884	9	.3
Spain	24,570	771	753	3.1	113	244	277E	31,871	291	.9
Sweden	21,340	2,733	924	4.3	57	1,278	600	7,808	70	.9
Switzerland	14,990	2,499	388	2.6	8	265	265	5,999	25	.4
Yugoslavia	9,020	457	406	4.5	197	414	203	19,735	264	1.3
Latin America	102,411	415	2,135	2.1	1,377	2,510	1,623	246,909	814	.3
Argentina	16,240	716	279	1.7	84	590	33	22,691	118	.5
Bolivia	661	156	17	2.6	33	23	23E	4,235	15	.4
Brazil	25,790	310	798	3.1	354	381	499E	83,175	220	.3
Chile	4,867	556	113	2.3	167	130	104	8,750	46	.5
Colombia	5,457	293	92	1.7	127	120	39	18,650	48	.3
Costa Rica	631	405	3	.57	18	21	57	1,558	0	0
Cuba	5,000E	638E	250E	5.0	1	226	150E	7,833	121	1.5
Dominican Republic	996	266	34	3.3	54	22	23E	3,750	19	.5
Ecuador	1,245	237	25	2.0	31	34	13	5,250	19	.4
El Salvador	845	284	10	1.2	23	20	11	2,978	6	.2
Guatemala	1,388	292	15	1.1	10	21	11	4,761	9	.2
Guyana	220	328	1	.57	10	8	8	870	1	*
Haiti	334	74	8E	2.4	4	4	3	4,485	5	.1
Honduras	536	227	7	1.3	11	11	6	2,363	5	.2
Jamaica	946	516	5	.5	13	21	15	1,833	2	.1
Mexico	21,770	493	166	.8	166	365	240	44,145	62	.1
Nicaragua	600	350	9	1.5	18	9	16	1,715	7	.4
Panama	698	542	1 ₂	.1	27	23	12	1,287	3	.2
Paraguay	463	221	8	1.7	14	7	2	2,094	11	.5
Peru	3,547	295	83	2.3	94	100	61	12,012	50	.4
Trinidad & Tobago	672	669	3	.4	12	16	15	1,004	1	*
Uruguay	1,565	569	26	1.6	13	18	16E	2,749	17	.6
Venezuela	7,940	890	182	2.3	94	340	286	8,921	30	.3
Far East	218,734	185	9,454	4.3	1,156	8,030	1,484	1,180,638	5,929	.5
Burma	1,700E	67E	113	6.6	390	39	16	25,246	110	.4
Cambodia	875E	139E	54	6.2	11	31	8	6,277	30	.5
China, Mainland	80,000E	104E	6,500E	8.1	80 E	2,800E	1,080E	772,000E	2,500	.3
China, Republic of	3,138	235	350	11.2	65	78	8	13,326	544	4.1
Indonesia	10,740E	100E	165	1.5	87	92	21	107,431	350	.3

See footnotes on page 13.

TABLE I. Continued

REGION AND COUNTRY	GROSS NATIONAL PRODUCT (GNP)		MILITARY EXPENDITURES		FOREIGN ECON. AID REC'D/ GIVEN ² / Mil \$	PUBLIC EDUCATION ³ / EXPENDITURES ⁴ / Mil \$	PUBLIC HEALTH EXPENDITURES ⁴ / Mil \$	POPULATION (MID YEAR) Thousands	ARMED FORCES % of Pop.	
	Mil \$	\$ Per Capita	Mil \$	% of GNP					Thousands	% of Pop.
<u>Far East (Cont'd)</u>										
Japan	\$ 97,480	\$ 986	\$ 933	1.0%	\$ 310	\$ 4,111	\$ 138E	98,865	246	.2%
Korea, North	2,900E	234E	225E	7.8%	NA	90	17E	12,400	368	3.0
Korea, Republic of	3,822	131	150	3.9	215	89	24	29,086	572	2.0
Laos	189E	70	35	18.5	69	5	18	2,700	60	2.2
Malaysia	3,022	311	121	4.0%	50	118	56	9,725	30	.3
Mongolia	500E	439E	25E	5.0%	NA	NA	1E	1,140	30	2.6
Philippines	5,728	171	84	1.5	73	282	30	33,477	42	1
Thailand	4,654	141	97	2.1%	59	86	26	32,922	132	.4
Vietnam, North	1,500E	77E	300E	20.0%	NA	129	27E	19,500	350	1.8
Vietnam, Republic of	2,066E	126E	302	14.5	510	80	12	16,543	565	3.4
<u>South Asia</u>										
Afghanistan	54,160	83	1,919	3.5	1,853	1,249	233	655,782	1,399	.2
Bangladesh	1,355	88	15	1.1	54	12	2	15,397	90	.6
Ceylon	1,688	147	14	.8	35	68	37	11,491	10	.1
India ⁹	36,895	74	1,400	3.8	1,325	1,002	161	501,800	1,000	.2
Nepal	772	75	7	1.0	13	2	10E	10,294	20	.2
Pakistan	13,450	115	483	3.6	426	165	23	117,000	279	.2
<u>Near East</u>										
Cyprus	24,751	284	1,868	7.5	22	972	614	87,165	668	.8
Iran	440	750	8	1.8	6	10	4	603	1	.2
Iraq	6,423	252	328	5.1	58	170	97	25,500	180	.7
Israel	2,235	268	207	9.3	9	111	22	8,338	79	.9
Jordan	3,822	1,454	400	10.5	134	169	36	2,629	71	2.7
Kuwait	520	266	61	11.7	73	13	4	1,954	40	2.0
Lebanon	1,700	3,462	55	3.2	1	47	32	491	3	.1
Saudi Arabia	1,250	476	38	3.0	8	36	11	2,624	12	.5
Syrian Arab Republic	1,670	380	202	12.1	21	89	38E	4,399	30	.7
Yemen	1,101	201	97	8.8	6	72	64	5,480	60	1.1
United Arab Republic	515	103	NA	NA	5	1	44E	5,000	2	*
	5,075	168	461	9.1	87	254	262E	30,147	190	.6
<u>Africa</u>										
Algeria	42,532	171	1,053	2.5	1,279	1,245	459	249,129	326	.1
Cameroon	2,662	219	99E	3.7	123	118	11E	12,150	60	.5
Central African Republic ..	720	135	16	2.2	42	17	9	5,350	3	.1
Chad	183	127	3E	1.6%	16	5	3E	1,437	1	.1
Congo, Brazzaville	252	75	5E	2.0%	20	5	3	3,361	*	*
	123	145	7E	5.7%	19	3	2E	3,850	2	.2

See footnotes on page 13.

TABLE 1. Continued

REGION AND COUNTRY	GROSS NATIONAL PRODUCT (GNP)		MILITARY EXPENDITURES		FOREIGN ECON. AID REC'D/ GIVEN ²	PUBLIC EDUCATION ³ / EXPENDITURES ³	PUBLIC HEALTH EXPENDITURES ⁴	POPULATION (MID-YEAR) Thousands	ARMED FORCES	
	Mill \$	\$ Per Capita	Mill \$	% of GNP					Thousands	% of Pop.
Africa (Cont'd)										
Congo, Kinshasa	\$ 1,800	\$ 111	\$ 106	5.9%	\$ 89	\$ 142	\$ 33E	16,273	30	.2%
Dahomey	170	71	4	2.4	16	4	5E	2,410	1	*
Ethiopia	1,484	65	34	2.3	40	10	46E	23,000	35	.1
Gabon	174	372	3	1.7	19	7	5	468	1	.2
Ghana	1,743	219	25	1.4	84	93	3	7,945	12	.2
Guinea	290	80	13	4.5	16	14	7E	3,629	5	.1
Ivory Coast	1,020	260	13	1.3	49	35	8E	3,920	4	.1
Kenya	1,114	116	12	1.1	68	35	19E	9,643	3	*
Liberia	226	207	3	1.3	53	5	3	1,090	4	.4
Libya	1,361	812	27	2.0	1	22	3E	1,877	8	.5
Malagasy Republic	665	110	11	1.7	46	41	11	6,055	3	*
Malawi	207E	51E	1	.5	32	11	3	4,035	1	*
Mali	325	70	5	1.5	21	14	9	4,868	3	.1
Mauritania	148	138	4	2.7	6	5	2	1,070	1	.1
Morocco	2,503	182	103	4.1	94	99	27E	13,725	45	.3
Niger	257	75	3	1.2	23	4	7E	3,433	1	*
Nigeria	5,450	125	66	1.2	96	84	87E	43,600	9	*
Rhodesia, Southern	997	227	15E	1.5 ⁷	2	17	13	4,400	5	.1
Senegal	716	200	15	2.1	48	22	7E	3,580	4	.1
Sierra Leone	378	157	3	.8	14	8	5E	2,403	2	.1
Somali Republic	155	60	7	4.5	17	2	3	2,570	8	.3
South Africa, Republic of	11,960	654	331	2.8	NA	258	37E	18,298	27	.1
Sudan	1,457	105	47	3.2	19	47	28E	13,940	18	.1
Tanzania	860	75	8 ⁸	1.0	39	27	8	11,487	2	*
Togo	190	113	3	1.6	15	3	2	1,680	1	.1
Tunisia	931	209	17	1.8	76	39	20	4,460	21	.5
Uganda	714	92	20	2.8	26	29	15E	7,740	3	*
Upper Volta	275	55	4	1.5	20	5	4	4,955	1	*
Zambia	1,022	267	20	2.0	32	15	11	3,827	3	.1
Oceania					0					
Australia	30,605	2,153	1,185	3.9	128	965	488	14,217	82	.6
New Zealand	25,130	2,178	1,065	4.2	128	788	290	11,541	69	.6
	5,475	2,046	120	2.2	NA	177	198	2,676	13	.5

See footnotes on page 13.

TABLE I. Concluded

NA Not available. E Rough ACDA estimate. * Less than one-half unit.

1/ For most countries conversion into U. S. dollars is at official par value exchange rates as employed with rounding by AID. For Argentina, Brazil, Chile, Colombia and Uruguay, "effective" rates estimated by AID are used. Approximate purchasing power equivalent rates are used for communist countries. See Appendix for further details.

2/ Entries not in italics show aid received; those in italics show aid given. Estimated aid given by communist countries is not distributed by recipient countries or regions, and is included as aid received only in the world total.

3/ Data are for 1965 or latest earlier year, except for U. S. (See Appendix).

4/ Most entries are estimates for 1966 based on data for earlier years. Those marked "E" are based on regional averages. (See Appendix).

5/ Includes West Berlin.

6/ The relationships between GNP and other dollar amounts shown or implied here may not be valid due to use of differentiated conversion rates for particular sectors. If measured in national currencies and at factor cost rather than at market prices, for example, Soviet military expenditures would be in the vicinity of 8-9% of GNP.

7/ Because either or both GNP and military expenditure estimates are approximations, the resulting ratio should be used with particular caution.

8/ Due to changes in the treatment of non-military expenditures of regular defense agencies, which are excluded, data for 1966 are not fully comparable to data previously published in the ACDA report for 1965.

9/ Value data are for fiscal year beginning April 1, and are converted at the new rate of Rs7.50, instead of Rs4.762, per US dollar, established in mid-1966.

U. S. Arms Control and Disarmament Agency November 1968.

TABLE II. MILITARY EXPENDITURES AND RELATED DATA--REGIONAL SUMMARY, 1966
(Amounts in U.S. dollars at current prices and exchange rates)

REGION AND COUNTRY	GROSS NATIONAL PRODUCT (GNP)		MILITARY EXPENDI- TURES		FOREIGN ECONOMIC AID		PUBLIC EDUCA- TION EXPENDI- TURES Bil \$	PUBLIC HEALTH EXPENDI- TURES Bil \$	POPULATION (MID-YEAR) Millions	ARMED FORCES	
	Bil \$	\$ Per Capita	Bil \$	% of GNP	REC'D Bil \$	GIVEN Bil \$				Millions	% of Pop
WORLD TOTAL	\$2,311.1	\$ 687	\$159.0	6.9%	\$7.1	\$7.9	\$110.8	\$52.2	3,363.4	20.3	.6%
North America United States	800.9 747.6	3,896 3,796	64.9 63.3	8.1 8.5	0 0	4.2 4.0	37.3 34.3	13.7 12.2	217.0 196.9	3.2 3.1	1.5 1.6
Europe European NATO	1,037.3	1,455	76.5	7.4	.6	3.1	58.5	33.5	712.9	7.9	1.1
Warsaw Pact	466.6	1,570	21.3	4.6	.3	2.5	18.8	6.1	297.1	2.9	1.0
Soviet Union	475.5	1,424	52.3	NA	0	.4	36.3	25.5	333.7	4.2	1.3
Other European	357.0	1,531	47.0	NA	0	.3	30.6	21.0	233.1	3.2	1.4
	92.2	1,123	2.8	3.1	.3	.1	3.4	2.0	82.1	.8	1.0
NATO Total	1,267.5	2,466	86.2	6.8	.3	6.8	56.1	19.8	514.0	6.1	1.2
Latin America	102.4	415	2.1	2.1	1.4	0	2.5	1.6	246.9	.8	.3
Far East China, Main- land	218.7	185	9.4	4.3	1.2	.4	8.0	1.5	1,180.6	5.9	.5
Japan	80.0	104	6.5	8.1	0	.1	2.8	1.1	772.0	2.5	.3
South Asia	97.5	986	.9	1.0	0	.3	4.1	.1	98.9	.2	.2
India	54.2	83	1.9	3.5	1.9	0	1.3	.2	655.8	1.4	.2
Near East	36.9	74	1.4	4.0	1.3	0	1.0	.2	501.6	1.0	.2
Africa	24.8	284	1.9	7.5	.4	*	1.0	.6	87.2	.7	.8
Oceania	42.5	171	1.1	2.5	1.3	*	1.2	.5	249.1	.3	.1
	30.6	2,153	1.2	3.9	0	.1	1.0	.5	14.2	.1	.6

NA Not available. * Negligible.

NOTE: See footnotes to Table I for details.

U.S. Arms Control and Disarmament Agency November 1968

TABLE III. MILITARY EXPENDITURES AND RELATED DATA FOR LESS DEVELOPED COUNTRIES ^{1/} REGIONAL SUMMARY, 1966
(Amounts in U.S. dollars at current prices and exchange rates)

REGION AND COUNTRY	GROSS NATIONAL PRODUCT (GNP)		MILITARY EXPENDITURES		FOREIGN ECONOMIC AID REC'D ^{2/}	PUBLIC EDUCA- TION EXPEN- DITURES	PUBLIC HEALTH EXPEN- DITURES	POPULATION (MID-YEAR)	ARMED FORCES	
	Bill \$	\$ Per Capita	Bill \$	% of GNP					Thousands	% of Pop
TOTAL LDC'S	\$395.0	\$ 164	\$17.4	4.4%	\$7.1	\$11.0	\$5.0	2,415	13,372	.4%
Europe	61.9	554	2.4	3.8	.6	1.4	.9	112	1,510	1.3
Latin America	102.4	415	2.1	2.1	1.4	2.5	1.6	247	814	.3
Far East	121.2	112	8.5	7.0	1.2	3.9	1.3	1,082	5,682	.5
South Asia	54.1	83	1.9	3.5	1.9	1.2	.2	656	1,399	.2
Near East	24.8	284	1.9	7.5	.4	1.0	.6	87	668	.8
Africa	30.6	134	.7	2.4	1.3	1.0	.4	231	299	.1
Total LDC's as % of World Total	17.4%	-	11.0%	-	100.0%	10.9%	10.1%	71.8%	51.1%	-
Total LDC's excluding Mainland China: Bill \$	315.0	192	11.0	3.5	7.1	8.1	4.0	1,643	7,872	.5
% of World Total	13.6%	-	6.8%	-	100.0%	8.0%	8.1%	48.8%	38.8%	-

^{1/} The 53 countries classified as less developed are: Albania, Bulgaria, Greece, Portugal, Spain, Turkey, and Yugoslavia in Europe; all Latin America; the Far East except Japan; all South Asia and the Near East; and Africa except the Republic of South Africa.

^{2/} Bulgaria, Kuwait, Mainland China, Portugal, Saudi Arabia, and Southern Rhodesia are considered net donors and are excluded. Entries do not add to the total because estimated aid given by communist countries is included in the world total but is not distributed by region and country. See Table I and Appendix.

TABLE IV. MILITARY EXPENDITURES AND GROSS NATIONAL PRODUCT, BY SELECTED LESS DEVELOPED COUNTRY, 1961, 1964-1966

(Amounts in millions of U.S. dollars at constant 1966 prices and 1966 exchange rates)

Region and Country	1961			1964			1965			1966		
	Gross National Product	Military Expenditures	Military As % of GNP	Gross National Product	Military Expenditures	Military As % of GNP	Gross National Product	Military Expenditures	Military As % of GNP	Gross National Product	Military Expenditures	Military As % of GNP
Europe												
Greece	34,223	\$175	4.1%	\$5,377	\$194	3.6%	\$6,056	\$216	3.6%	\$6,579	\$240	3.6%
Portugal	3,060	201	6.6	3,693	243	6.6	3,946	245	6.2	4,070	240	5.9
Spain	17,311	499	2.9	21,452	648	3.0	23,099	613	2.7	24,570	753	3.1
Turkey	6,851	379	5.5	8,116	411	5.1	8,562	448	5.2	9,420	445	4.7
Latin America												
Argentina	14,906	429	2.9	15,182	317	2.1	16,387	278	1.7	16,240	279	1.7
Brazil	21,363	495	2.3	23,587	854	3.6	24,694	681	2.8	25,790	798	3.1
Chile	3,844	97	2.5	4,347	119	2.7	4,598	110	2.4	4,867	113	2.3
Colombia	4,395	79	1.8	5,020	85	1.7	5,185	104	2.0	5,457	92	1.7
Ecuador	973	22	2.3	1,147	23	2.0	1,186	25	2.1	1,245	25	2.0
Mexico	15,661	109	.7	19,204	135	.7	20,230	159	.8	21,770	166	.8
Peru	2,635	79	3.0	3,222	102	3.2	3,361	97	2.9	3,547	83	2.3
Uruguay	1,543	17	1.1	1,511	25	1.6	1,525	23	1.5	1,565	26	1.6
Venezuela	6,105	131	2.1	7,359	151	2.1	7,722	175	2.3	7,940	182	2.3
Far East												
Korea, Republic of	2,517	143	5.7	3,118	78	2.5	3,371	131	3.9	3,822	150	3.9
Philippines	4,599	66	1.4	5,217	84	1.6	5,499	80	1.5	5,728	84	1.5
China, Republic of	1,909	179	9.4	2,550	223	8.7	2,868	221	7.7	3,138	350	11.2
Malaysia	2,205	34	1.7	2,657	82	3.1	2,833	115	4.1	3,022	121	4.0
South Asia												
Ceylon	1,458	17	1.2	1,603	13	.8	1,635	13	.8	1,688	14	.8
India	32,443	654	2.0	37,925	1,476	3.9	36,374	1,535	4.2	36,895	1,400	4.0
Pakistan	10,216	296	2.9	12,098	339	2.8	12,541	668	5.3	13,450	483	3.6
Near East												
Iran	4,762	202	4.2	5,404	229	4.2	5,911	294	5.0	6,423	328	5.1
Iraq	1,635	131	8.0	1,835	180	9.8	2,001	206	10.3	2,235	207	9.3
Israel	2,606	203	7.8	3,523	298	8.5	3,807	308	8.1	3,822	400	10.5
Jordan	343	57	14.9	487	65	13.3	506	66	13.0	520	61	11.7
Africa												
Ethiopia	1,236	22	1.8	1,373	30	2.2	1,422	36	2.6	1,484	34	2.3
Ghana	1,540	35	2.1	1,714	27	1.6	1,717	28	1.6	1,743	25	1.4
Kenya	825	2	.2	990	8	.8	1,014	10	1.0	1,114	12	1.1
Morocco	2,124	97	4.6	2,539	115	4.5	2,572	102	4.0	2,503	103	4.1
Nigeria	4,136	28	.7	4,794	50	1.0	5,114	70	1.4	5,450	66	1.2
Sudan	1,174	19	1.6	1,351	31	2.3	1,379	33	2.4	1,457	47	3.2
Tanzania	1,592	0	0	1,714	1	.1	1,770	6	.8	1,860	8	1.0
Tunisia	784	17	2.2	882	17	1.9	936	14	1.5	931	17	1.8
Uganda	553	0	0	642	7	1.1	667	9	1.4	714	20	2.8
Zambia	751	0	0	833	3	.3	1,046	11	1.1	1,022	20	2.0

U.S. Arms Control and Disarmament Agency November 1968

TABLE V. PURCHASING POWER EQUIVALENTS OF MILITARY EXPENDITURES AND GROSS NATIONAL PRODUCT, BY SELECTED COUNTRY, 1964-1966
(Amounts in U.S. dollars at current prices and purchasing power equivalent rates 1/)

REGION AND COUNTRY	1964				1965				1966			
	GROSS NATIONAL PRODUCT		MILITARY EXPENDITURES		GROSS NATIONAL PRODUCT		MILITARY EXPENDITURES		GROSS NATIONAL PRODUCT		MILITARY EXPENDITURES	
	Mill \$	\$ Per Capita	% of World Total	% of World Total	Mill \$	\$ Per Capita	% of World Total	% of World Total	Mill \$	\$ Per Capita	% of World Total	% of World Total
WORLD TOTAL	\$2,179,126	\$ 675	100.0%	100.0%	\$2,317,054	\$701	100.0%	100.0%	\$2,551,292	\$ 759	100.0%	100.0%
North America	677,500	2,305	31.1	37.2	737,000	2,444	31.7	37.0	806,550	2,717	31.6	38.4
United States	624,700	2,272	28.9	36.0	683,900	2,514	29.4	35.7	747,600	2,796	29.3	38.4
Canada	48,800	2,537	2.2	1.3	53,700	2,740	2.3	1.2	58,950	2,940	2.3	1.1
Europe	975,074	1,402	44.8	50.6	1,034,458	1,466	44.5	50.4	1,140,137	1,599	44.7	48.5
NATO, European	497,444	1,615	21.5	16.5	495,806	1,667	21.3	17.0	537,093	1,808	21.1	14.4
Belgium	18,800	2,616	0.9	0.6	19,700	2,670	0.8	0.6	21,032	2,207	0.8	0.5
Denmark	10,400	2,213	0.5	0.3	10,900	2,254	0.5	0.3	11,786	2,458	0.5	0.2
France	99,000	2,061	4.6	4.1	105,000	2,159	4.6	4.2	109,281	2,212	4.3	3.8
Germany, West	177,400	2,003	8.1	8.5	184,000	2,114	8.0	8.4	191,072	2,398	8.7	3.0
Greece	4,500	529	0.2	0.1	5,200	620	0.2	0.1	5,857	690	0.2	0.1
Iceland	NA	NA	NA	0	280	1,354	0	0	282	1,439	0	0
Italy	64,500	1,302	3.0	1.7	69,800	1,354	3.0	1.7	72,727	1,400	2.9	1.3
Netherlands	21,000	1,705	1.0	0.7	23,000	1,871	1.0	0.7	24,075	1,933	0.9	0.6
Norway	7,300	1,976	0.3	0.2	8,100	2,179	0.3	0.2	8,857	2,307	0.3	0.2
Portugal	5,300	572	0.3	0.3	6,030	655	0.3	0.3	6,429	689	0.3	0.2
Turkey	8,000	206	0.4	0.3	9,500	306	0.4	0.3	10,456	328	0.4	0.3
United Kingdom	100,000	1,992	5.0	4.8	112,000	2,055	4.8	5.1	121,670	2,223	4.8	4.2
Others, at official rates 1/	924	1,787	0	0	628	1,897	0	0	676	2,018	0	0
NATO Total	1,145,031	2,267	52.6	53.8	1,233,406	2,426	53.0	53.9	1,343,553	2,614	52.7	53.9
Warsaw Pact	404,000	1,231	18.5	31.6	435,300	1,279	18.3	31.0	478,500	1,434	18.8	31.7
Bulgaria	NA	NA	NA	NA	6,800	829	0.3	0.1	7,600	918	0.3	0.1
Czechoslovakia	NA	NA	NA	NA	22,100	1,556	1.0	0.9	23,800	1,671	0.9	0.8
Germany, East	104,000	1,037	4.8	3.5	26,000	1,565	1.1	0.7	28,300	1,658	1.1	0.7
Hungary	NA	NA	NA	NA	11,100	1,099	0.5	0.2	12,000	1,179	0.5	0.2
Poland	NA	NA	NA	NA	30,800	978	1.3	1.2	33,200	1,047	1.3	1.1
Romania	NA	NA	NA	NA	14,800	779	0.6	0.3	16,600	867	0.7	0.3
Soviet Union	300,000	1,316	13.8	28.1	312,000	1,358	13.5	27.6	357,000	1,531	14.0	28.5
Other European	105,220	1,326	4.8	2.5	113,450	1,437	4.9	2.4	124,634	1,517	4.9	2.4
Austria	12,400	1,723	0.6	0.1	13,240	1,800	0.6	0.1	14,393	1,974	0.6	0.1
Finland	8,100	1,779	0.4	0.1	9,840	2,148	0.4	0.1	10,446	2,252	0.4	0.1

See footnote on page 19.

TABLE V. Continued

REGION AND COUNTRY	1964				1965				1966			
	GROSS NATIONAL PRODUCT		MILITARY EXPENDITURES		GROSS NATIONAL PRODUCT		MILITARY EXPENDITURES		GROSS NATIONAL PRODUCT		MILITARY EXPENDITURES	
	Mil \$	\$ Per Capita	% of World Total	Mil \$	Mil \$	\$ Per Capita	% of World Total	Mil \$	Mil \$	\$ Per Capita	% of World Total	Mil \$
Ireland	2,840	997	1.1%	65	2,980	1,046	1.1%	35	3,118	1,081	1.1%	39
Spain	26,600	849	1.2	777	29,600	937	1.3	785	31,978	1,003	1.3	980
Sweden	26,400	3,446	1.2	1,233	28,100	3,635	1.2	1,230	29,972	3,839	1.2	1,208
Switzerland	14,800	2,521	.7	400	15,400	2,593	.7	401	16,527	2,755	.6	428
Yugoslavia	14,040	728	.6	730	14,400	738	.6	624	16,200	922	.7	820
Latin America	97,361	422	4.5	2,128	100,845	419	4.3	2,348	113,851	401	4.5	2,524
Argentina	19,100	895	.9	204	19,450	870	.8	421	21,455	946	.8	369
Bolivia	396	98	.	6	429	104	.	9	446	105	.	11
Brazil	27,800	349	1.3	996	28,400	348	1.2	961	32,143	386	1.3	994
Chile	4,880	587	.2	130	5,430	618	.2	114	5,740	656	.2	178
Colombia	6,010	354	.3	104	5,910	329	.3	118	6,554	351	.3	139
Dominican Rep.	630	182	.	22	594	164	.	22	596	159	.	20
Ecuador	754	155	.	15	776	153	.	17	839	160	.	17
Mexico	17,700	429	.8	115	18,800	440	.8	148	20,298	460	.8	155
Paraguay	312	164	.	9	339	169	.	10	351	168	.	11
Peru	3,260	294	.1	109	3,460	296	.1	100	3,863	322	.2	103
Uruguay	1,260	437	.1	16	1,100	405	.	16	1,577	574	.1	26
Venezuela	7,320	836	.3	152	7,450	854	.3	168	8,120E	910E	.3	189
Others, at official rates 1/	7,909	296	.4	250	8,707	336	.4	279	11,870	389	.5	312
Far East	275,876	344	12.7	8,355-11,355	293,532	254	12.6	9,414	324,426	275	12.7	10,724
Cambodia	456	76	.	26	472	77	.	30	518	83	.	32
China, Mainland	70,000	96	3.2	4,000-7,000	76,000	101	3.3	6,000	80,000E	104E	3.1	6,500E
China, Rep. of	3,820	306	.2	316	4,300	331	.2	331	4,353	327	.2	535
Japan	167,000	1,723	7.7	1,460	175,000	1,786	7.5	1,622	196,400	2,017	7.6	1,910
Korea, Rep. of	4,230	153	.2	158	4,620	163	.2	175	5,671	193	.2	222
Malaysia	3,560	392	.2	112	3,820	406	.2	161	4,301	442	.2	172
Thailand	3,760	124	.2	88	4,020	128	.2	88	4,840	154	.2	104
Others, at official rates 1/	22,810	106	1.0	2,195	25,350	173	1.5	1,007	25,343	116	1.0	1,249
Near East	21,510	263	1.0	1,438	24,524	291	1.1	1,714	23,657	271	.9	2,021
Iran	4,900	204	.2	207	5,440	220	.2	268	6,074	236	.2	310
Iraq	2,690	357	.1	213	2,820	344	.1	289	384	25	.	297

See footnotes on page 19.

TABLE V. Concluded

REGION AND COUNTRY	1964					1965					1966				
	GROSS NATIONAL PRODUCT			MILITARY EXPENDITURES		GROSS NATIONAL PRODUCT			MILITARY EXPENDITURES		GROSS NATIONAL PRODUCT			MILITARY EXPENDITURES	
	Mil \$	\$ Per Capita	% of World Total	Mil \$	% of World Total	Mil \$	\$ Per Capita	% of World Total	Mil \$	% of World Total	Mil \$	\$ Per Capita	% of World Total	Mil \$	% of World Total
Israel	\$ 2,788	\$ 1,126	.1%	\$ 236	.2%	\$ 3,168	\$ 1,236	.1%	\$ 256	.2%	\$ 3,230	\$ 1,229	.1%	\$ 338	.2%
Jordan	432	234	.	57	.	496	261	.	64	.	520	266	.	61	.
United Arab Republic	5,910	206	.3	448	.3	6,410	217	.3	532	.4	6,773	225	.3	615	.4
Others, at official rates 1/	4,790	281	.2	277	.2	6,190	356	.3	307	.2	6,076	359	.3	400	.3
South Asia	54,133	87	2.5	1,905	1.3	53,746	84	2.3	2,249	1.5	61,759	24	2.4	2,291	1.4
Ceylon	1,680	154	.1	13	.1	1,770	158	.1	14	.1	1,878	163	.1	16	.1
India	42,000	88	1.9	1,630	1.1	40,500	83	1.7	1,710	1.2	46,618	93	1.8	1,860	1.1
Pakistan	8,750	79	.4	244	.2	9,280	83	.4	494	.3	10,933	93	.4	393	.2
Others, at official rates 1/	1,703	71	.1	18	.	1,986	76	.1	28	.	2,127	83	.1	22	.
Africa	34,752	145	1.9	823	.8	38,399	155	2.0	1,038	.9	42,227	169	1.7	1,015	.6
Ghana	2,010	287	.1	21	.1	2,023	283	.1	19	.1	2,660	339	.1	38	.1
Morocco	2,960	228	.1	135	.1	3,120	235	.1	123	.1	3,197	233	.1	131	.1
Nigeria	5,950	139	.3	61	.	6,440	151	.3	79	.1	6,664	153	.3	81	.
South Africa, Rep. of	8,354	478	.4	304	.2	8,641	429	.4	253	.2	9,531	521	.4	264	.2
Sudan	432	33	.	9	.	435	33	.	10	.	434	31	.	14	.
Tunisia	1,120	243	.1	21	.	1,260	276	.1	18	.	1,223	274	.	23	.
Others, at official rates 1/	13,926	100	.6	272	.2	16,480	113	.7	536	.4	18,488	126	.7	464	.3
Oceania	32,530	2,309	1.5	949	.7	33,900	2,406	1.5	1,211	.8	38,678	2,721	1.5	1,366	.8
Australia	26,780	2,339	1.2	845	.6	27,900	2,437	1.2	1,080	.7	32,430	2,810	1.3	1,350	.7
New Zealand	5,750	2,178	.3	104	.1	6,000	2,273	.3	130	.1	6,248	2,335	.2	136	.1

NA Not Available. * Less than one-half unit.

1/ All countries not listed in the present table but listed in Table I have been shown here by region as "Others, at official rates." These include countries for which estimated effective rates were used as well as countries for which official rates were used. (See Table I, footnote 1.)

TABLE VI. RANKING OF MAJOR COUNTRIES ACCORDING TO GNP AND MILITARY EXPENDITURES, 1966
(Amounts at current prices and purchasing power equivalent dollars)

COUNTRY	GROSS NATIONAL PRODUCT				MILITARY EXPENDITURES	
	Rank	Total	Bil \$	Per Capita	Rank	Bil \$
United States*	1		\$747.6	2		\$83.3
Soviet Union*	2		357.0	19		47.0
Japan	3		199.4	14		1.9
West Germany	4		144.1	7		4.9
United Kingdom*	5		121.7	11		6.9
France*	6		109.3	12		6.3
Mainland China*	7		80.0	58		6.5
Italy	8		72.7	21		2.1
Canada	9		58.9	3		1.8
India	10		46.8	59		1.9
Poland	11		33.2	24		1.8
Australia	12		32.4	4		1.2
Brazil	13		32.1	38		1.0
Spain	14		32.0	25		1.0
Sweden	15		30.0	1		1.3
East Germany	16		28.3	18		1.1
Netherlands	17		24.1	16		1.0
Czechoslovakia	18		23.8	17		1.4
Argentina	19		21.5	26		.4
Belgium	20		21.0	13		.9
Mexico	21		20.3	36		.2
Yugoslavia	22		18.2	27		.8
Romania	23		16.6	30		.5
Switzerland	24		16.5	5		.4
Austria	25		14.4	15		.2
Hungary	26		12.0	22		.3
Denmark	27		11.8	6		.3
Pakistan	28		10.9	60		.4
Turkey	29		10.5	41		.5
Finland	30		10.4	10		.2

* Denotes country possessing nuclear weapons.

Note: All value data in this table are from Table V; see also notes to Table I for explanation of data on communist countries.

APPENDIX

Notes on Data, Sources and Methods

Since a major purpose of this report is to compile world-wide and regional totals of military spending and to provide a basis for comparison with other economic information, coverage was made as broad as possible. It should be emphasized that in doing so, it was necessary to include national data which are in some cases very approximate estimates. It is believed that world-wide and regional totals adequately show orders of magnitude and can be viewed with considerable confidence. For some individual countries, however, particularly those with national statistical systems in early stages of development, or those having a policy of limited disclosure of data, considerable allowance should be made for imprecise or noncomparable data.

Numerous factors affect comparability and the interpretations to be made of national differences. For example, many elements of gross national product, particularly in a developing country, may escape measurement; military programs may draw from several parts of national budgets; social service expenditures are undertaken by various levels of government and are not always reported consistently. Also, the public versus private shares in the support of national programs vary significantly among countries. In planned-economy countries, the share of public support through national budgets is larger than in market-economy countries. In some cases religious or other non-governmental organizations provide services analogous to those provided by governments in other countries.

The data presented here have been obtained largely from statistical materials prepared by the U.S. Agency for International Development (AID) and various international agencies. AID compiles population, gross national product and military expenditures data for most non-communist countries. These materials are contained in AID's economic data books for various regions and individual countries, as well as other special purpose AID publications and compilations. The considerable effort made by AID to adjust reported national data in accordance with standard concepts and definitions and in the light of evaluations by U.S. Missions abroad makes this body of material particularly useful for present purposes.

Other types of data have been obtained from various international agencies, particularly the

Organization for Economic Cooperation and Development (OECD), the World Health Organization (WHO), and the United Nations Educational, Scientific and Cultural Organization (UNESCO). These agencies also seek to provide standard data for inter-country comparisons, but because of limitations and ambiguities in national reports they, like AID, are not always able to achieve full comparability. Data designated in the tables by the symbol "E" are approximate estimates made by ACDA on the basis of limited information.

Further discussion of data concepts, sources and methods will be found below.

Country Groupings

Country groupings and regions follow AID practice. They are essentially geographical. It should be noted, however, that "North America" consists only of the U.S. and Canada; Mexico and all of Central and South America are included in "Latin America." "Total NATO" consists of "North America" and "European NATO," with the latter including Turkey. Also, the United Arab Republic is assigned to the "Near East" with other Asian countries and not to "Africa."

Developed and Less-Developed Countries

Of the 120 countries covered in the report, 93 are classified as "less-developed" and 27 as "developed." (See Definitions of Terms, page 7, for the countries falling in each category.)

For the non-communist countries, the assignment of countries to one or the other category follows AID practice. For both non-communist and communist, the assignment attempts to take account of such factors as income levels, national literacy and mortality rates, levels of industrialization, and terms of trade. Most of the countries classified as LDC's have a per capita GNP below \$500, and all but Israel and Kuwait have less than \$1,000. Although they also are below the latter level, Japan, Romania and the Republic of South Africa are classed as developed.

Gross National Product (GNP)

AID is the source of the GNP data in this report for 84 non-communist LDC's. In most cases, these data are based on national

accounts published by the country in question; for the remaining LDC's where such data are not available, GNP figures are based on estimates of agricultural and industrial production and other available information.

GNP data for OECD and other developed non-communist countries are from the International Monetary Fund monthly, International Financial Statistics.

Warsaw Pact GNP data are from the US Congress Joint Economic Committee, Soviet Economic Performance: 1966-67, May 1968. Other communist country estimates are based on very limited information and should be considered rough approximations only.

Military Expenditures

AID compiles figures on military expenditures for most free world countries, adjusting national data to a standard definition of military expenditures where possible. The standard definition calls for current and capital expenditures made to meet the needs of the armed forces. This includes all expenditures of national defense agencies except those for civilian programs. Also included are the military components of mixed military-civilian activities such as atomic energy, space, research and development, and paramilitary forces, where such components can be distinguished.

Military assistance to foreign countries, retirement pensions of career personnel, and military stockpiling are included in the standard concept of military expenditures, whereas civil defense, civilian space and industrial stockpiling are excluded.

The estimate of Soviet military spending in US dollars is adapted from various estimates made by Western analysts. Many Western observers believe that the Soviet defense budget omits some expenditure categories which are in Western defense budgets and that Soviet prices in the military sector understate values when compared with US prices. The figure for Soviet military expenditures represents an estimate of what equivalent dollar amounts would be if the expenditures were made at U.S. prices.

Military expenditures for the remainder of the Warsaw Pact countries are based on announced military budgets with some upward adjustment to make coverage comparable to Western concepts; like the Soviet estimate they represent approximate purchasing power equivalents.

For Mainland China, a very rough estimate is derived from fragmentary information. No budgetary data have been issued since 1960.

Foreign Economic Aid

With the exception of estimates for Warsaw Pact countries, the data are based on information made available by the Development Assistance Committee (DAC) of OECD. These data cover aid given by the 16 donor countries which report to the DAC: Australia, Austria, Belgium, Canada, Denmark, France, West Germany, Italy, Japan, Netherlands, Norway, Portugal, Sweden, Switzerland, United Kingdom and the United States. Their aid is made up of disbursements of official (i.e., governmental) net bilateral grants and grant-like aid, gross bilateral lending (gross of repayments of principal only) and net contributions to multilateral agencies.

Data shown for DAC donor countries include bilateral aid to countries, territories and dependencies not covered by the present report. In the case of Portugal, which is considered "developed" by OECD and "less-developed" in this report, the aid shown in Table I is given entirely to Portuguese overseas provinces. Due to this difference in coverage, the bilateral aid component of all DAC donor entries in Table I exceeds the bilateral aid component of the recipient entries by \$1.1 billion.

On the other hand, the contributions of DAC donors to multilateral agencies were less than the aid extended by these agencies in 1966. The net result of these two partially offsetting disparities—the incomplete coverage of recipients in the case of bilateral aid, and the excess of aid given over contributions received by multilateral agencies—accounts for the discrepancy of \$.7 billion between total world-wide aid received and given as shown in Table I.

Entries for communist donors show estimated gross aid drawn by non-communist LDC's only; aid between communist countries is excluded. These data were estimated by ACDA on the basis of aid commitments data published by the Department of State and of various other sources. In view of marked differences between aid commitments and actual withdrawals from communist donors, these estimates should be considered only rough approximations. Aid given by communist countries is shown only by donor country and in aid received; receipts of this aid are not included in aid-received entries for countries and regions.

Education

World-wide data for 1966 public education expenditures are not expected to be available until 1969. Except for the U.S., the data used in the present report were taken from the UNESCO Statistical Yearbook 1966, Geneva, 1968, together with some revisions and additions provided to ACDA by UNESCO. These data relate to 1965 for 37 countries and previous years for most others. The Malagasy Republic entry is for 1966, and includes a substantial component financed by foreign aid.

The entry for the United States represents an estimate for calendar year 1966 based on figures for fiscal years 1966 and 1967, as reported in Social Security Bulletin, December 1967, issued by the U.S. Department of Health, Education and Welfare.

Health

The data for public spending on health were taken largely from two reports of the World Health Organization (WHO): Third Report on the World Health Situation, 1961-1964, Geneva, 1967, and Supplement to the Third Report on the World Health Situation, 1965-1966, Geneva, 1968 (mimeographed). The Supplement is provisional and subject to revision.

The data generally reflect current expenditures for the provision of health services by agencies and institutions at all levels of government. Since capital outlay data are unavailable or ambiguous for many countries, such outlays are excluded to provide greater inter-country comparability.

(In the 21 countries for which public health capital outlays are available for 1965 or 1966 these expenditures averaged 10 percent of current outlays. The evidence suggests wide variations from country to country and also from year to year but in most cases capital expenditures are below 25 percent of current expenditures.)

The WHO sources provide 1966 data for 35 countries. Where 1966 data are not reported, the most recent per capita expenditure rates available were applied to the 1966 population. Where no country data are reported, ACDA estimates (indicated by "E" in Table I) were made on the basis of regional average per capita dollar expenditures shown in the Supplement cited above, with some adjustments. The figure for the United States is from the Social Security Bulletin, April 1968, issued by the U.S. Department of Health, Education and Welfare.

Population

Population estimates for mid-1966 are primarily from the United Nations Demographic Yearbook, 1966, New York, 1967. In selected cases, AID modifications made on the basis of evaluations from U.S. Missions abroad were used. The estimate for Mainland China is based on John S. Aird, "Population Growth and Distribution in Mainland China", in Joint Economic Committee of Congress, An Economic Profile of Mainland China, Volume 2, 1967.

Armed Forces

The data are intended to cover military personnel actually on duty, including paramilitary forces where such forces add substantially to a nation's military capabilities. Reserves are excluded for all countries in the present report. In reports for previous years, such reserves had been included for Switzerland, where the national militia includes all able-bodied males, and for Israel, where reserves are a high percentage of the readily mobilized fighting force.

Estimates for the number of men under arms were derived from data in The Statesman's Year-Book, 1967-1968, MacMillan London, 1967; the Reader's Digest Almanac and Yearbook, 1967, New York, 1966; and the Institute of Strategic Studies' The Military Balance 1966-1967, London, September 1966.

Conversion Rates

For the conversion of data from foreign currencies to U.S. dollars, official exchange rates were used for most of the national totals shown in Tables I through IV. Alternative rates were used for the Warsaw Pact nations, including the Soviet Union, and for several countries in Latin America and the Far East for which official rates appeared to yield unrealistic dollar equivalents.

For the Warsaw Pact countries, rough purchasing power factors were used in place of official rates to convert national currencies into dollars. In most cases of conversion, including for the Soviet Union, different purchasing power factors were used for GNP, military expenditures, foreign aid, public health and education, in order to make the respective dollar values more comparable to U.S. values. The proportions among the components of GNP consequently suffer some distortion and should not be considered precise. The conversion factors used for Argentina, Brazil, Chile, Colombia and Uruguay are estimated by AID as

representing "effective rates" appropriate to foreign transactions. For some countries where official rates are not established or are inactive, e.g., Indonesia, available market rates considered most appropriate were used.

The use of official exchange rates as in Tables I-IV of the present report can produce significant distortions in magnitudes and trends. The Indian rupee, for example, underwent a 37% devaluation in mid-1966. As a consequence, 1966 dollar values for India in Table I at the new official exchange rate show a GNP that is more than \$20 billion lower and military expenditures that are \$.8 billion lower than they would have been at the previous official rate. The \$.8 billion represents over 40% of total military expenditures in South Asia.

Table V represents an effort to obtain a more realistic and consistent basis for international comparisons than official exchange rates, which are set primarily for foreign trading purposes. In this table GNP and military expenditures are shown for all countries in addition to those of the Warsaw Pact for which there was some means of computing purchasing power equivalent (PPE) rates, that is, conversion rates from national currencies into U.S. dollars which take into account what the value of equivalent goods and services would be if purchased in the U.S.

The initial PPE computations were done under the guidance of an ACDA consultant, Professor Emile Benoit of Columbia University. The primary sources of information were the research studies by Gilbert and Kravis on OECD countries, as published in Comparative National Products and Price Levels, A Study of Western Europe and the United States, OECD, Paris, 1958, and the more recent work by Wilfred Beckerman and Robert Bacon, published in the Royal Economic Society's The Economic Journal, London, September, 1966.

The Gilbert and Kravis study provides separate PPE rates for GNP and military expenditures for each of eight OECD countries (Belgium, Denmark, France, West Germany, Italy, Netherlands, Norway, and the United Kingdom). For the other nations shown in Table V, PPE rates applicable to GNP are also used to convert military expenditures. ACDA has updated the rates to 1966 by the use of national price indexes found in International Monetary Fund International Financial Statistics.

A brief description of the methodology used in constructing the PPE rates and a table of the factors used are available from the Economics Bureau of ACDA.

Prices

The estimates of approximate trends in military spending and GNP from 1964 through 1967 in constant 1967 prices, as discussed and charted in the text, are based on average deflators for the developed and less-developed countries as a group. These were derived by ACDA from GNP growth rates estimated by AID for these groups of countries on a worldwide basis (excluding communist countries) using constant 1966 prices and exchange rates. (AID, Gross National Product: Growth Rates and Trend Data by Region and Country, RC-W-138, July 25, 1968.) GNP growth rates in real terms, together with growth rates derived from data at current prices and exchange rates as reported by ACDA, yield factors for converting current dollars into constant dollars which adjust for both price and exchange rate changes. For communist countries, whose estimates in current dollars are intended to reflect current purchasing power equivalence, the implicit price deflators applicable to U.S. GNP (U.S. Department of Commerce, Office of Business Economics, Survey of Current Business, July 1968) were used to convert to 1967 dollars. The same deflator was used for GNP and military expenditures. (This implies the assumption that the ratio of military expenditures to GNP remained constant in both current and constant dollar terms.)

A similar procedure was used in Table IV, where military expenditures and GNP data for selected less developed countries are shown for 1961, 1964, and 1965 as well as 1966, at 1966 prices and exchange rates. Data for the pre-1966 years were published by ACDA in World-Wide Military Expenditures and Related Data, Calendar Year 1965 at 1965 prices and rates. These data were converted to 1966 prices and rates by means of conversion factors obtained as the ratio of 1965 GNP data for each country at 1966 prices and rates, as prepared by AID, and 1965 data at 1965 prices and rates, as shown in ACDA's report for 1965. The conversion factors account for changes in both prices and the exchange rates used by AID, and were used for both GNP and military expenditures.